

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously presented) A method for visualization of a 3-dimensional (3-D) image comprising:

converting a 3-D scene model into a plurality of 3-D scene points;

providing at least a portion of the plurality of 3-D scene points to a 3-D display plane comprising 3-D pixels that are directionally modulated;

calculating at each of the 3-D pixels a contribution of light from the 3-D pixel to generate at least in part a scene point of the plurality of 3-D scene points; and

performing at least one of emitting and transmitting the light by each of the 3-D pixels that is calculated to contribute to the scene point.

2. (Previously presented) The method according to claim 1, wherein light is emitted and/or transmitted by 2-D pixels comprised within said 3-D pixels, each 2-D pixel directing light into a different direction contributing light to a scene point of said 3-D scene model.

3. (Previously presented) The method according to claim 1, wherein said 3-D scene points are provided sequentially, or in parallel, to said 3-D pixels.

4. (Previously presented) The method according to claim 1, wherein the calculation of the contribution of light of a 3-D pixel to a certain 3-D scene point is made previous to the provision of said 3-D scene points to said 3-D pixels.

5. (Currently amended) The method according to claim 1, wherein the contribution of light of a 3-D pixel to a certain 3-D scene point is calculated within one 3-D pixel of one row or of one

column previous to the provision of said 3-D scene points from the one 3-D pixel to the remaining 3-D pixels of a row or a column, respectively.

6. (Previously presented) The method according to claim 1, wherein a 3-D pixel outputs an input 3-D scene point to at least one neighboring 3-D pixel.

7. (Currently amended) The method according to claim 1, wherein each 3-D pixel alters the co-ordinates of a 3-D scene point prior to putting out said altered 3-D scene point from each 3-D pixel to at least one neighboring 3-D pixel.

8. (Previously presented) The method according to claim 1, wherein if more than one 3-D scene point needs the contribution of light from one 3-D pixel, the depth information of said 3-D scene point is decisive.

9. (Previously presented) The method according to claim 1, wherein

2-D pixels of the 3-D display plane transmit and/or emit light only within one plane.

10. (Previously presented) The method according to claim 1, wherein color is incorporated by spatial or temporal multiplexing within each 3-D pixel.

11. (Previously presented) A 3-D display device, comprising:

a 3-D display plane with 3-D pixels, said 3-D pixels comprise an input port and an output port for receiving and putting out 3-D scene points of a 3-D scene, each of said 3-D pixels comprise a control unit located at each of the 3-D pixels for calculating their own contribution to the visualization of a 3-D scene point representing said 3-D scene.

12. (Currently amended) The 3-D display device according to claim 11, wherein said 3-D pixels are interconnected for parallel and serial transmission of 3-D scene points from a given 3-D pixel to neighboring 3-D pixels.

13. (Previously presented) The 3-D display device according to claim 11, wherein said 3-D pixels comprise a spatial light modulator with a matrix of 2-D pixels.

14. (Previously presented) The 3-D display device according to claim 13, wherein said 3-D pixels comprise a point light source, providing said 2-D pixel with light.

15. (Previously presented) The 3-D display device according to claim 13, wherein said 3-D pixels comprise registers for storing a value determining which ones of said 2-D pixels within said 3-D pixel contribute light to a 3-D scene point.

16. (Previously presented) The method of claim 1, wherein the calculating of the contribution comprises calculating whether a current 3-D scene point is closer to a viewer than a past 3-D scene point.

17. (Previously presented) The 3-D display device of claim 11,

wherein the control unit calculates whether a current 3-D scene point is closer to a viewer than a past 3-D scene point.